

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (Currently Amended) An expanded hematopoietic cell population of ~~committed progenitor hematopoietic cells and/or non-differentiated, early hematopoietic progenitor cells,~~ ~~said expanded hematopoietic cell population~~ obtained by *ex vivo* culturing of seeded hematopoietic cells in a culture medium providing said hematopoietic cells with conditions for cell proliferation and in the presence of a transition metal chelator, ~~said chelator~~ having an affinity for copper,

wherein said chelator and said proliferation conditions result in (i) prolonged active hematopoietic cell proliferation; (ii) prolonged expansion of clonogenic cells (CFUc); and (iii) maintenance of undifferentiated hematopoietic cells in their undifferentiated state,

~~and present in an amount sufficient to inhibit~~ thereby inhibiting differentiation while permitting expansion of said hematopoietic cell population in said culture medium,

and wherein said hematopoietic cells are hence expanded yet not further differentiated as compared to *ex vivo* seeded hematopoietic cells from which said expanded hematopoietic cell population expanded.

Claim 2 (Previously Presented) The expanded hematopoietic cell population of claim 1, wherein said cells are provided in said medium.

Claim 3 (Previously Presented) The expanded hematopoietic cell population of claim 1, wherein said cells are isolated from said medium.

Claim 4 (Previously Presented) A pharmaceutical composition comprising the expanded hematopoietic cell population of claim 1.

Claim 5 (Previously Presented) A pharmaceutical composition comprising the expanded hematopoietic cell population of claim 3.

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Claim 6 (Cancelled)

Claim 7 (Currently Amended) The expanded hematopoietic cell population of claim 1, wherein said seeded cells are enriched for ~~hematopoietic stem or progenitor cells~~ committed progenitor hematopoietic cells.

Claim 8 (Currently Amended) The expanded hematopoietic cell population of claim 1, wherein said hematopoietic cells are derived from ~~a source selected from the group consisting of peripheral blood, bone marrow and~~ neonatal umbilical cord blood.

Claims 9-17 (Cancelled)

Claim 18 (Currently Amended) The expanded hematopoietic cell population of claim 1, wherein said transition metal chelator is ~~selected from the group consisting of polyamine chelating agents, ethylenediamine, diethylenetriamine, triethylenetetramine, triethylenediamine, tetraethylenepentamine, aminoethylethanolamine, aminoethylpiperazine, pentaethylenehexamine, triethylenetetramine hydrochloride, tetraethylenepentamine hydrochloride, pentaethylenehexamine hydrochloride, tetraethylpentamine, captopril, penicillamine, 1,4,7-triazaacyclononane trihydrochloride, and 1-oxa-4,7,10-triazaacyclododecane.~~

Claim 19 (Currently Amended) The expanded hematopoietic cell population of claim 1, wherein said culture medium comprises nutrients and a cytokine or cytokines.

Claim 20. (Currently Amended) The expanded hematopoietic cell population of claim 19, wherein said cytokine or cytokines is an early acting cytokine or cytokines.

Claim 21 (Currently Amended) The expanded hematopoietic cell population of claim 20, wherein said early acting cytokine is ~~selected from the group consisting of stem cell factor, FLT3 ligand, interleukin-6, thrombopoietin and interleukin-3.~~

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Claim 22 (Currently Amended) The expanded hematopoietic cell population of claim 19, wherein said cytokine or cytokines is a late acting cytokine or cytokines.

Claim 23 (Currently Amended) The expanded hematopoietic cell population of claim 22, wherein said late acting cytokine is ~~selected from the group consisting of~~ granulocyte colony stimulating factor, ~~granulocyte/macrophage colony stimulating factor and erythropoietin.~~

Claims 24-51 (Cancelled)

Claim 52 (Currently Amended) The expanded hematopoietic cell population of claim ~~54~~ 18, wherein said transition metal chelator concentration is about 0.1  $\mu$ M to about 100 mM.

Claim 53 (Previously Presented) The expanded hematopoietic cell population of claim 52, wherein said transition metal chelator concentration is about 4  $\mu$ M to about 50 mM.

Claim 54 (Previously Presented) The expanded hematopoietic cell of claim 53, wherein said transition metal chelator concentration is about 5 $\mu$ M to about 40 mM.

Claims 55-62 (Cancelled)

Claim 63 (New) The expanded hematopoietic cell population of claim 1, wherein said seeded cells are enriched for non-differentiated, early progenitor hematopoietic cells.

Claim 64 (New) The expanded hematopoietic cell population of claim 1, wherein said seeded cells are enriched for CD34<sup>+</sup> hematopoietic cells.